# Feature Article

## **A Look At Emergency Phone Numbers**

### Call 911 or 123 Depending Where You Live

Text by John Bolduc

Then In Rome Do As the Romans Do. Don't Dial 911, Dial 112

There's a hold up in the Bronx, Brooklyn's broken out in fights. There's a traffic jam in Harlem that's backed up to Jackson Heights. There's a scout troop short a child, Khrushchev's due at Idlewild Car 54, Where Are You?

That's the lyrics to the television show Car 54, where are you. The mythical Car 54 operated out of NYPD's 53rd Precinct. This was my first image as a child as to who responded to an emergency call when such a call was placed. Back when the show aired in the early 1960's on NBC, if you had an emergency, very often you had the 7 digit, or as in my city 5 digit, phone number posted next to the phone. The phone back then was attached to a short cord, or mounted to a wall and you never had to go looking for it! If for some reason you did not have the number for the police or fire department posted in a conspicuous place, dialing 0 for Operator would get you in the right direction. When Alexander Graham Bell placed the worlds first emergency call, "Watson come here, I want you", there was no dialing mechanism at all. That was on March 10, 1876 when Mr. Bell spilled some acid upon himself

As extension phones became in vogue and society became even more mobile, having the emergency number either handy or memorized became much less likely. Even if you remembered the emergency number from when you lived in Springfield, it's not the same number now that you live in Newtown.

Enter an idea. A universal three digit number that would connect you to a public safety call receiving operator. Actually an idea older than you may realize. As you read on, think of the depression of the 1930's. The economy might have been down, but creative thinking and innovation was alive and well.

#### Timeline:

July, 1937 - The first wide area universal number to report emergencies was first used in England, in July of 1937. The Brits could ring 999 to call for police, medical or fire departments, from anywhere in the country. The system was implemented as a result of a disastrous fire. Calls were delayed reporting fatal fire that took five lives. The first 999 call was placed at when a resident in London called to report a burglar outside her home. The burglar was

apprehended.

June, 1959 - The city of Winnipeg Manitoba in Canada initiated a 999 emergency number system.

1961 - Australia introduces its 000 emergency number in metropolitan areas of the country.

1967 - Congress passed the legal mandate to establish an emergency phone number.

February, 1968 - The first "staged" American 911 call was placed in Haleyville, Alabama by an independent phone company.

January, 1968 - AT&T announces their designation of 911 as a universal emergency number at a press conference in the Washington (DC) office of Indiana Rep. Ed Roush, who had championed for Congressional support for "one number." AT&T's plan affected only the Bell companies, and not any of the independent telephone companies. Up to this point, the number "911" wasn't mentioned in any literature, and apparently wasn't identified until the press conference. In fact, a Wall Street Journal article written the day before the press conference didn't mention "911" as the number that AT&T selected. (At this point I'd like to thank AT&T for continuing to send me a quarterly dividend check of 96 cents).

February, 1968 - Nome Alaska implements their 911 system.

March, 1970 - First California 911 system is installed in the city of Gustine in Merced County, in the state's central valley.

1976 - Chicago Illinois has the first enhanced 911 system of any major city in the United States. It is called enhanced, but has far fewer features than today's E911.

January, 1977 - AT&T began working on a full Enhanced 911 systems in Orange County Florida. This trial system had the features of ANI, ALI,m selective routing and selective transfer.

December, 1982 - The metro Minneapolis-St. Paul area implements an E911 system that was reportedly the first multi-county Enhanced system in the country. It served seven surrounding counties.

1996 - A hacker in England was able to cause some havoc in the State of Florida. He developed a computer program to access simultaneous several 911 circuits and for a short time crippled several 911 answering points. He was caught by British authorities and dealt with.

March, 2000 - A hacker from Texas wrote a program to cause modems to dial 911 at random, but this was discovered before any damage was done. Once

again, the subject was dealt with.

October, 2001 - St. Clair County Illinois is the first communications center in the country to provide Phase II wireless E911 service, (Verizon Wireless customers only).

December, 2001 - Rhode Island 911 began state-wide Phase II on from Sprint PCS customers with assisted-GPS handsets.

#### But Why Use 911?

Why was the number 911 chosen as the emergency number. I have some thoughts on that. First is followed the pattern of similar telephone company services in some areas of a three digit service number. For instance, 411 for information, 611 for customer service. The phone company also used similar numbers in some areas for internal use such as 511 and 711. The number chosen also could not be that first three digits on an area code used in the country. Why not 999. My though on that is because rotary phones were still by far the most common phone in the late 1960's and it was much quicker to dial 911 than 999. Then again, it would have been very quick to dial 111, but that number, or any number beginning with 1, was not available through the switching systems of that era.

When you call 911 from a home hard wired phone your call is often directed to what is referred to as a public safety

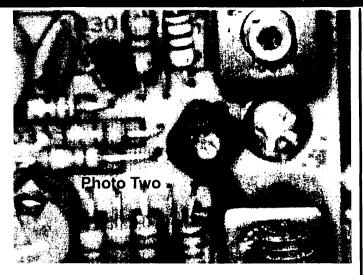
answering point (PSAP). In my home state of New Hampshire, there are two such point, the first on-line was in Concord, the second in Laconia. Things get interesting when you place a cell call to 911 from New Hampshire, Maine, or Vermont. All these calls get routed first to the PSAP in New Hampshire. Neither your cell phone number nor the callers location is displayed to the 911 operator. Not exactly an ideal situation as many travelers who come across an emergency do not know exactly where they are.

That is why E911 was developed. Phase One Enhanced 911 is a system that helps emergency providers in gathering information related to the calls. When you dial 911 from a cell phone, the system provides the operator with your wireless phone number and the location of the cellular tower handling the call.

#### **Emergency Numbers Around the World**

This list is presented by the author to demonstrate the various emergency number around the world, however, this should not be relied upon if you are visiting a foreign country. Check with local officials or service providers for the most up to date information when traveling:

County	Number	Notes /	교육 발생들이 있는 경기를 받는 것 같다. 교육 발생들은 기계		Swedish (in
Languages		경우, 그림 크린 왕으로 함께 모르다 일본 - 그리고 있는 그리고 있는 것이다.	기를 바늘된다고 있는데 한 경기를 하는데 하는데 있다. 기를 수밖에 들었는데, 사람들은 사람들은 사람이		bilingual areas).
Argentina	101		Finland	10022	old number Police
Australia	100	김 왕에 영향을 하는 경험했다.	France	112	French, border
Australia	000	Original number	경기를 받는 것이 되었다. 그 보고 있는 것이 되는 것이 되었다. 사용하루 기업을 다 들어 있는 것이 되었다.		regions English,
		introduced in	과 사용 전에 가장 보다는 것이 있는 것도 있다. 1975년 전 1985년 1일 1985년 19		German or
		1961.	경기 회사를 하고 있습니다. 그런 그런 그는 그는 것이 없는데 1997년 1월 1일		Spanish
Austria	112	German and	France	15	Ambulances
		English.	France	17	Police
Austria	112*		France	18	Fire Dept
Austria	122	(Firefighters)	Germany	110	Police)
Austria	133	(Police)	Germany	112	German.
Austria	144	(Ambulances)	Greece	100	(Police)
Belgium	100	(Firefighters,	Greece	112	Greek, English
		Ambulances)	and French.		• • •
Belgium	101	(Police) Belgium	Greece	166	(Ambulances)
	112	Dutch, French or	Greece	199	(Firefighters)
		German varying	Iceland	0112	Old number
		by region	Iceland	112	Icelandic, Nordic
Brazil	190				languages and
Canada	911				English (3rd party
Colombia	123				translation
Denmark	112				available)
Denmark	112	Danish,	Ireland	112	English
		Norwegian,	Ireland	999	Old number
		Swedish, English	Israel	100	
		and German	Italy	112	Police Italian
England	999		and		English.
Finland	112	Finnish and	Continued on page 3	1	



component in the area of concern on the VCO board was a trimmer capacitor. See Photo2. C319 with a value of 6\_20Pf, it is the square plastic part directly to the left of the Philips head screw. The normal function of this capacitor was to setting the "lock range" or frequency operating window for the VCO. Given the very high frequency(VHF,,) range the VCO operated within, it would not take much to cause the VCO to fail as the result of a poor connection inside the trimmer, due to contamination or fatigue. We replaced the trimmer with one of the same value and adjusted it to ensure the VCO would "lock" across the range needed for full frequency coverage for the scanner, and have not seen any further problems thus far.

#### **Ouick Mods For The TS1/2**

For those that want to use the TS1 or TS2 essentially as a programmable discriminator source "platform", the tap point for the FM Discriminator is at pin 10 of IC U201, which should be marked as an "ULN3859", which generically is a typical MC3359 IC. An easy connection point to use instead of pin 10, is at Test Point TP201, which directly in front of the IC.

Another useful add on for this old classic is what I call an "almost no effort S Meter"; this done by tapping the AGC(Automatic Gain Control) output on the IC used for detecting AM modulated Air Band signals. In most scanners the IC used for AM signal detection is turned ON only when Air Band is selected. However in the old TS1/2, it is continuously active, but the AGC is used only for AM mode operation. Therefore, all that you need to do is attach a 1K ohm resistor to pin 12 of IC203. This should be marked as a CA3088, and is located towards the front, between where the two ribbon cables tie onto the Main board. The resistor serves to simply protect the IC from the AGC line being shorted to Ground. On the other side of the resistor, connect a 0 to 1 MA meter. You can also connect a 5 or 10K ohm trimpot in line as a means of calibrating the meter to read a full scale for the strongest signal.

Continued from pa	ge 33	
Italy	115	Fire Dept
Italy	118	Ambulances
Jamaica	119	
Japan	110	
Liechtenstein	112	German and
		English
Luxembourg	112	Luxembourg's,
24/10111004110		German, French
		and English.
Luxembourg	113	unknown
Mexico	080	partial country
MEXICO	000	coverage provided
		by 3rd party for
		fee
Netherlands	112	Dutch and
Nettieriarius	112	English.
New Zealand	111	Implemented in
New Zealanu	111	1958.
Marrian	110	Fire Dept
Norway	110	Police
Norway	112	
		Norwegian and
NY	110	English.
Norway	113	Ambulance
Philippines	111	
Poland	997	D
Portugal	112	Portuguese,
		Spanish, English
	445	and French.
Portugal	115	unknown
Portugal	117	Forestry
Romania	961	
Russia	051	very limited
		coverage area
South Africa	112	
Spain	061	Ambulance
Spain	080	Fire Dept
Spain	091	Police
Spain	112	Spanish, in some
		regions English,
		French, or German
Spain	532	old number
Sweden	90000	old number
Sweden	112	Swedish and
		English, some
		regions German,
,		French, Finnish
		and Spanish.
Thailand	191	
United Kingdom	112	English, Welsh in
Ť		Wales.
United Kingdom	999	old number
United States	911	